

Please type a plus sign (+) inside this box →



PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

Compl t If Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT			
(use as many sheets as necessary)			
Sheet	1	of	5
		Attorney Docket Number	
		SYM 116/118	

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	US Patent Document		Name of Patentee or Applicant of Cited Document	Date of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
SW	—	5,658,782		Amara et al.	08-19-1997	—
	—	5,731,348		Gu	03-24-1998	—
	—	5,739,284		Hediger et al.	04-14-1998	—
	—	5,776,774		Amara et al.	07-07-1998	—
	—	5,840,516		Amara et al.	11-24-1998	—
	—	5,882,926		Amara et al.	03-16-1999	—
	—	5,912,171		Amara et al.	06-15-1999	—
	—	5,919,699		Amara et al.	07-06-1999	—
	—	5,919,628		Amara et al.	07-06-1999	—
	—	5,932,424		Amara et al.	08-03-1999	—
	—	5,989,825		Amara et al.	11-23-1999	—
	—	6,020,479		Amara et al.	02-01-2000	—
	—	6,060,307		Amara et al.	05-09-2000	—
	—	6,074,828		Amara et al.	06-13-2000	—
	—	6,090,560		Amara et al.	07-18-2000	—

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code ⁵ (if known)				

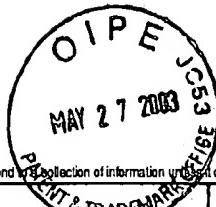
Examiner Signature: *Sandra Negri* Date Considered: *2/22/04*

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MP&P 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to application.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SENT TO: Assistant Commission for Patent, Washington, DC 20231.

Please type a plus sign (+) inside this box →



MAY 28 2003

TECH CENTER 1600/2900

PTO/SB/08A (10-96)
/99. OMB 0651-0031
ENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for Form 1449A/PTO <i>ENT & TRADEMARKS</i>		Complete If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/944,954
		Filing Date	September 1, 2001
		First Named Inventor	Phillip M. Beart
		Group Art Unit	1614 1647
		Examiner Name	Weber
		Attorney Docket Number	SYM 116/118
Sheet	2	of	5

U.S. PATENT DOCUMENTS

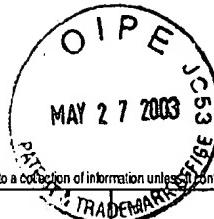
FOREIGN PATENT DOCUMENTS

Examinee Signature	Sandra Negus	Date Considered	2/22/04
-----------------------	--------------	-----------------	---------

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶ Applicant to place a check mark here if English language

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT

Please type a plus sign (+) inside this box →



REVIEWED
MA 8 2003
TECH CENTER 1600/2900

PTO/SB/08A (10-98)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO

Complete If Known

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(use as many sheets as necessary)

Sheet

3

of

5

Application Number	09/944,954
Filing Date	September 1, 2001
First Named Inventor	Phillip M. Beart
Group Art Unit	1614 / 647
Examiner Name	Weigert
Attorney Docket Number	SYM 116/118

OTHER ART -- NON PATENT LITERATURE DOCUMENTS

Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SW	✓ APRICO, et al., "[³ H]-[2S,4R]-4-methylglutamate: a novel ligand for the characterisation of astrocytic glutamate transporters," <i>Soc. Neurol. Abstr.</i> 26(1-2): 539.8 (2000), abstract only.		✓
	✓ ARRIZA, et al., "Excitatory amino acid transporter 5, a retinal glutamate transporter coupled to a chloride conductance," <i>Proc. Natl. Acad. Sci. U.S.A.</i> 94(8): 4155-4160 (1997).		✓
	✓ ARRIZA, et al., "Functional comparisons of three glutamate transporter subtypes cloned from human motor cortex," <i>J. Neurosci.</i> 14(9): 5559-5569 (1994).		✓
	✓ BERGLES & JAHIR, "Glial contribution to glutamate uptake at Schaffer collateral-commissural synapses in the hippocampus," <i>J. Neurosci.</i> 18(19): 7709-7716 (1998).		✓
	✓ BRIDGES, et al., "A pharmacological review of competitive inhibitors and substrates of high-affinity, sodium-dependent glutamate transport in the central nervous system," <i>Curr. Pharmaceut. Des.</i> 5(5): 363-379 (1999).		✓
	✓ CARROLL, et al., "Regional distribution of low affinity kainate receptors in brain of Macaca fascicularis determined by autoradiography using [³ H](2S,4R)-4-methylglutamate," <i>Neurosci. Lett.</i> 255(2): 71-74 (1998).		✓
	✓ DUNLOP, et al., "The pharmacological profile of L-glutamate transport in human NT2 neurones is consistent with excitatory amino acid transporter 2," <i>Eur. J. Pharmacol.</i> 360(2-3): 249-256 (1998).		✓
	✓ DUNLOP, et al., "Properties of excitatory amino acid transport in the human U373 astrocytoma cell line," <i>Brain Res.</i> 839(2): 235-242 (1999).		✓
	✓ FAIRMAN, et al., "An excitatory amino-acid transporter with properties of a ligand-gated chloride channel," <i>Nature</i> 375(6532): 599-603 (1995).		✓
	✓ FURUTA, et al., "Glutamate transporter protein subtypes are expressed differentially during rat CNS development," <i>J. Neurosci.</i> 17(21): 8363-8375 (1997).		✓

Examiner's Signature

Date Considered

2/22/04

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

Please type a plus sign (+) inside this box →



Y 28 2003
TECH CENTER 1600/2900

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information if it does not contain a valid OMB control number.

Substitute for form 1449A/PTO		Complaint If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number Filing Date First Named Inventor Group Art Unit Examiner Name	09/944,954 September 1, 2001 Phillip M. Beart 1614 WEAVER
Sheet	4	of	5
		Attorney Docket Number	SYM 116/118

OTHER ART -- NON PATENT LITERATURE DOCUMENTS

Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SW	/	GEGELASHVILI, et al., "High affinity glutamate transporters: regulation of expression and activity," <i>Mol Pharmacol</i> 52(1): 6-15 (1997).	/
	/	GU, et al., "Synthesis, resolution, and biological evaluation of the four stereoisomers of 4-methylglutamic acid: selective probes of kainate receptors," <i>J Med Chem</i> 38(14): 2518-2520 (1995).	/
	/	KANAI, et al., "Primary structure and functional characterization of a high-affinity glutamate transporter," <i>Nature</i> 360(6403): 467-471 (1992).	/
	/	LEBRUN, et al., "New beta-hydroxyaspartate derivates are competitive blockers for the bovine glutamate/aspartate transporter," <i>J. Biol. Chem.</i> 272(33): 20336-20339 (1997).	/
	/	LI, et al., "The Na ⁺ -dependent binding of [3H]L-aspartate in thaw-mounted sections of rat forebrain," <i>Exp. Brain Res.</i> 97(3): 415-422 (1994).	/
	/	LIPTON, et al., "Excitatory amino acids as a final common pathway for neurologic disorders," <i>N. Engl. J. Med.</i> 330(9): 613-622 (1994).	/
	/	MITROVIC, et al., "Identification of functional domains of the human glutamate transporters EAAT1 and EAAT2," <i>J. Biol. Chem.</i> 273(24): 14698-14706 (1998).	/
	/	PALOS, et al., "Rat C6 and human astrocytic tumor cells express a neuronal type of glutamate transporter," <i>Brain Res. Mol. Brain Res.</i> 37(1-2): 297-303 (1996).	/
	/	PINES, et al., "Cloning and expression of a rat brain L-glutamate transporter," <i>Nature</i> 360(6403): 464-467 (1992).	/
	/	ROBINSON, et al., "Heterogeneity and functional properties of subtypes of sodium-dependent glutamate transporters in the mammalian central nervous system," <i>Adv. Pharmacol</i> 37: 69-115 (1997).	/

Examiner's Signature	Sandra Weigert	Date Considered	2/22/04
----------------------	----------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

RECEIVED

MAY 28 2003

TECH CENTER 1400

PTO/SB/08A (10-96)
Approved for use through 10/31/99. OMB 0651-0091
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCEPlease type a plus sign (+) inside this box → 

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Substitute for form 1449A/PTO		Completeness If Known	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)		Application Number	09/944,954
Sheet	5	of	5
		Attorney Docket Number	SYM 116/118

OTHER ART -- NON PATENT LITERATURE DOCUMENTS

Examiner's Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
SW	1	ROTHSTEIN, et al., "Knockout of glutamate transporters reveals a major role for astroglial transport in excitotoxicity and clearance of glutamate," <i>Neuron</i> 16(3): 675-686 (1996).	/
	1	SHIMAMOTO, et al., "DL-threo-beta-benzyloxyaspartate, a potent blocker of excitatory amino acid transporters," <i>Mol. Pharmacol.</i> 53(2): 195-201 (1998).	/
	1	STORCK, et al., "Structure, expression, and functional analysis of a Na(+)-dependent glutamate/aspartate transporter from rat brain," <i>Proc. Natl. Sci. U.S.A.</i> 89(22): 10955-10959 (1992).	/
	1	TOMS, et al., "A novel kainate receptor ligand [3H]-[2S,4R]-4-methylglutamate: pharmacological characterization in rabbit brain membranes," <i>Neuropharmacology</i> 36(11-12): 1483-1488 (1997).	/
	1	VANDENBERG, "Molecular pharmacology and physiology of glutamate transporters in the central nervous system," <i>Clin. Exp. Pharmacol. Physiol.</i> 25(6): 393-400 (1998).	/
	1	VANDENBERG, et al., "Contrasting modes of action of methylglutamate derivatives on the excitatory amino acid transporters, EAAT1 and EAAT2," <i>Mol. Pharmacol.</i> 51(5): 809-815 (1997).	/
	1	VANDENBERG, et al., "Serine-O-sulphate transport by the human glutamate transporter, EAAT2," <i>Br. J. Pharmacol.</i> 123(8): 1593-1600 (1998).	/
	1	YE, et al., "Compromised glutamate transport in human glioma cells: reduction-mislocalization of sodium-dependent glutamate transporters and enhanced activity of cystine-glutamate exchange," <i>J. Neurosci.</i> 19(24): 10767-10777 (1999).	/
	1	ZHOU, et al., "(2S,4R)-4-methylglutamic acid (SYM 2081): a selective, high-affinity ligand for kainate receptors" <i>J. Pharmacology Exper. Therapeutics</i> 280(1): 422-427 (1997).	/

Examiner's Signature	Sandra Weigert	Date Considered	2/22/04
----------------------	----------------	-----------------	---------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² See attached Kinds of U.S. Patent Documents. ³ Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. ⁶ Applicant to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you require to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

+